
हड्डी ओल — विशिष्टि

(पहला पुनरीक्षण)

Bone Awl — Specification

(First Revision)

ICS 11.040.40

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FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Orthopaedic Instruments, Implants and Accessories Sectional Committee had been approved by the Medical Equipment and Hospital Planning Division Council.

This standard was originally published in 1971. The first revision of this standard has been brought out to align it with the recent developments and to bring the standard in line with the latest style and format of Indian Standards.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

Indian Standard
BONE AWL — SPECIFICATION
(First Revision)

1 SCOPE

This standard covers the requirement for bone awl used in orthopaedic surgery.

2 REFERENCES

There are no references in this text.

3 MATERIAL

The awl shall be made in one piece from stainless steel having the following composition:

<i>Sl No.</i>	<i>Constituent</i>	<i>Percent</i>
(1)	(2)	(3)
i)	Carbon	0.35 to 0.45
ii)	Silicon	1.0 <i>Max</i>
iii)	Manganese	1.0 <i>Max</i>
iv)	Nickel	1.0 <i>Max</i>
v)	Chromium	12.5 to 14.5
vi)	Sulphur	0.03 <i>Max</i>
vii)	Phosphorus	0.03 <i>Max</i>

4 SHAPE AND DIMENSIONS

The shape and dimensions shall be as shown in Fig. 1.

5 WORKMANSHIP AND FINISH

All the surfaces of the awl shall be free from pits, burrs, cracks and other surface defects. The cutting edge of the instrument shall be properly sharpened and shall be free from pits, burrs, nicks and waviness. All the other edges shall be even. The awl shall be passivated and finished smooth and bright.

6 HEAT TREATMENT

The awl shall be hardened and tempered to 500 HV to 600 HV.

7 TESTS**7.1 Performance Test**

The awl shall be held firmly in one hand and three consecutive holes shall be made in a dry sheep bone of minimum 20 mm diameter consistent with its normal use. The awl shall make the holes easily and cleanly without any sign of damage.

7.2 Flexibility Test

The awl shall be gripped by one hand and an attempt shall be made to bend the awl using manual force. The awl shall not take a permanent set.

7.3 Fatigue Test

The awl shall be gripped firmly and horizontally in a vice and a load of 20 N shall be gradually applied and allowed to remain for 2 minutes at a distance of 6 mm from the tip. On completion of the test, the awl shall not show any sign of damage and shall not have acquired a permanent set.

8 MARKING

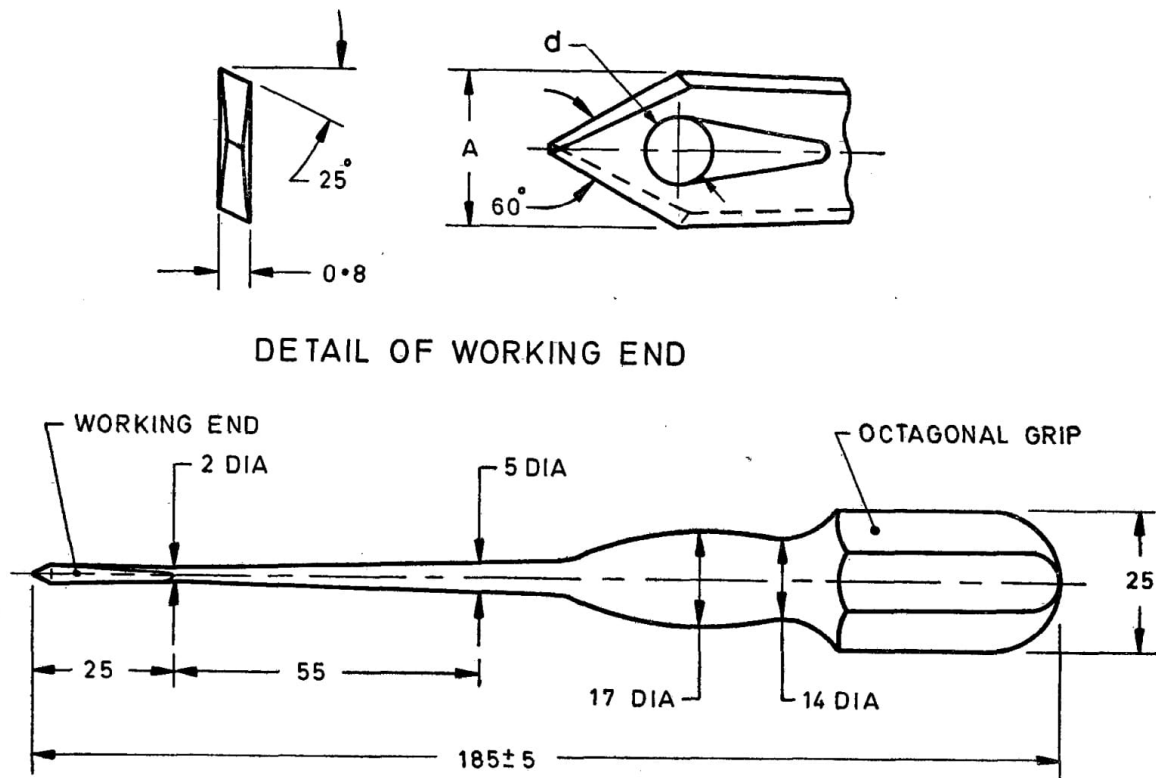
8.1 The awl shall be legibly and indelibly marked with the manufacturer's name, initials or registered trade-mark.

8.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed there under, and the product(s) may be marked with the Standard Mark.

9 PACKING

The packing shall be as agreed to between the purchaser and the supplier.



A (1)	d (2)
2.0	1.00
3.0	1.30
4.0	1.30

All dimensions in millimetres

FIG. 1 AWL, BONE

Bureau of Indian Standards

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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